



US010648573B2

(12) **United States Patent**
Keller et al.

(10) **Patent No.:** **US 10,648,573 B2**

(45) **Date of Patent:** **May 12, 2020**

(54) **FLUIDIC SWITCHING DEVICES**

(71) Applicant: **Facebook Technologies, LLC**, Menlo Park, CA (US)

(72) Inventors: **Sean Jason Keller**, Kirkland, WA (US); **Jack Lindsay**, Seattle, WA (US); **Serol Turkyilmaz**, Redmond, WA (US); **John Michael Lutian**, Bellevue, WA (US); **Tristan Thomas Trutna**, Seattle, WA (US); **Andrew Arthur Stanley**, Seattle, WA (US)

(73) Assignee: **Facebook Technologies, LLC**, Menlo Park, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 40 days.

(21) Appl. No.: **15/683,937**

(22) Filed: **Aug. 23, 2017**

(65) **Prior Publication Data**

US 2019/0063619 A1 Feb. 28, 2019

(51) **Int. Cl.**

G05D 7/03 (2006.01)

F16K 31/02 (2006.01)

F16K 3/28 (2006.01)

F16K 31/385 (2006.01)

F16K 3/34 (2006.01)

G06F 3/01 (2006.01)

(52) **U.S. Cl.**

CPC **F16K 3/28** (2013.01); **F16K 3/34** (2013.01); **F16K 31/02** (2013.01); **F16K 31/385** (2013.01); **G06F 3/014** (2013.01); **G06F 3/016** (2013.01)

(58) **Field of Classification Search**

CPC **F16K 3/28**; **F16K 31/02**; **F16K 99/0026**; **F16K 99/0015**; **F16K 99/0061**; **F15C 3/04**

USPC 137/105; 251/5, 61.1
See application file for complete search history.

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Primary Examiner — Minh Q Le

(74) Attorney, Agent, or Firm — FisherBroyles, LLP

(57)

ABSTRACT

A fluidic device controls fluid flow in channel from a source to a drain. In some embodiments, the fluidic devices comprises a gate, a channel, and an obstruction. The gate comprises at least one chamber whose volume increases with fluid pressure. A high pressure state of the gate corresponds to a first chamber size and a low pressure state of the gate corresponds to a second chamber size that is smaller than the first chamber size. The obstruction controls a rate of fluid flow within the channel based on the fluid pressure in the gate. The obstruction induces at most a first flow rate of fluid in the channel in accordance with the low pressure state of the gate, and at least a second flow rate of the fluid in the channel in accordance with the high pressure state of the gate.

20 Claims, 16 Drawing Sheets

